



## ANTHRAX

### What is anthrax?

Anthrax is a serious disease caused by *Bacillus anthracis*, a bacteria that forms spores. A spore is a cell that is dormant (asleep) but may come to life under the right conditions. Spores can survive outside the body for long periods of time.

There are three types of anthrax, which involve the:

1. Skin (**cutaneous anthrax**) - The first symptom is a raised itchy bump that resembles an insect bite but within 1-2 days develops into a blister and then a painless ulcer. Fever and painful swollen lymph nodes can be present.
2. Lungs (**inhalational anthrax**) - The first symptoms are like cold or flu symptoms and can include sore throat, fever and muscle aches. Later symptoms include cough, chest discomfort, shortness of breath, tiredness, and muscle aches. (But don't assume that just because a person has cold or flu symptoms, he/she has inhalational anthrax.)
3. Digestive system (**gastrointestinal anthrax**) - The first symptoms are nausea, loss of appetite, bloody diarrhea, and fever, followed by bad stomach pain.

### How do you get it?

Humans can become infected with anthrax by handling products from infected animals or by breathing in anthrax spores from infected animal products (like wool, for example). People also can become infected with gastrointestinal anthrax by eating undercooked meat from infected animals.

Anthrax also can be used as a weapon. This happened in the United States in 2001, when anthrax was deliberately spread through the postal system by sending letters with powder containing anthrax. This caused 22 cases of anthrax infection.

Anthrax is not known to spread from one person to another.

### How soon do infected people get sick?

Symptoms can appear within 7 days of coming in contact with anthrax spores for all three types of the disease. For inhalation anthrax, symptoms can appear within a week or can take up to 42 days to appear.

### How dangerous is anthrax? Is there a treatment?

Antibiotics are used to treat all three types of anthrax. Treatment is usually for 60 days. Success depends on the type of anthrax and how soon treatment begins.

Usually early treatment with antibiotics will cure cutaneous anthrax. Even if untreated, 80% of people who become infected with cutaneous anthrax do not die. Gastrointestinal anthrax is more serious, resulting in death in 25-60% of cases. Inhalational anthrax is much more severe. In the 2001 outbreak, about half of the cases of inhalational anthrax ended in death. Early identification and treatment are important.

### Can a person who is exposed to anthrax spores be treated so that they will not become sick?

If a person is thought to have recently breathed in anthrax spores, they will generally be given an antibiotic (such as ciprofloxacin or doxycycline) to prevent illness from occurring.

### Is there a vaccine for anthrax?

There is a vaccine to prevent anthrax, but it is not yet available for the general public.

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**Ready in 3** is an emergency-preparedness program for Missouri. The Missouri Department of Health and Senior Services sponsors the program. **Ready in 3** aims to help residents and communities prepare for many types of emergencies from tornadoes to terrorism. For more information, visit [www.dhss.mo.gov](http://www.dhss.mo.gov).

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**What should I do if I think I have anthrax?**

If you are showing symptoms of anthrax infection, call your health-care provider right away.

**What should I do if I think I have been exposed to anthrax?**

Contact local law enforcement officials immediately if you think that you may have been exposed to anthrax. This includes being exposed to a suspicious package or envelope that contains powder.

**What should I do if cases of anthrax start to occur in my community?**

Your local health department and the Missouri Department of Health and Senior Services will provide you with information.

Adapted from CDC. *Anthrax: What You Need To Know*. July 31, 2003.